

Thermoplastic polymers, rubbery polymeric components and reinforcing fillers are mixed and heated to a range of 380°F to 440°F. The resulting mixture is then fed into a Banbury mixer, with the resulting mixture fed into a diverter feeding two molds. The velocity of the piston of each mold being filled is controlled to thereby control the density of the molded product along its length. As each mold is filled, it is deposited in a cool water bath (50°F-60°F) while the next mold is being filled. The molds are sequentially transferred to an air cooling rack to complete the process. A texture, generally comprising indentations perpendicular to the longitudinal axis on the molded object, provides a frictional surface between the railway crosstie and the ballast beneath the crosstie.